Comparisons of Job Characteristics

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Environmental Scientists and Specialists, Including Health

(19-2041)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 57

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations		Focus Occupation's Rating		Evaluation of Focus Occupation	
Mathematics	9.2	15.5	10.6	<<	Extensive education and/or training may be required	
Chemistry	4.8	14.9	5.4	<<	Extensive education and/or training may be required	
Biology	3.7	14.8	9.4	<<	Extensive education and/or training may be required	
Law and Government	5.9	13.5	9.9	<<	Extensive education and/or training may be required	
Geography	3.9	12.7	13.3	0	Current knowledge level may be sufficient	
Engineering and Technology	5.7	12.1	7.9	<<	Extensive education and/or training may be required	
Physics	4.3	10.5	5.2	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	•	Focus Occupation's Rating	Evaluation of Focus Occupation	
Reading Comprehension	10.7	16.1	11.6	<<	Extensive development of skills in this area may be required
Science	4.5	15.7	6.0	<<	Extensive development of skills in this area may be required

Writing	9.2	14.4	9.1	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	13.4	9.1	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	13.1	10.7	<	A higher skill level may be required
Active Learning	8.7	13.0	8.6	<<	Extensive development of skills in this area may be required
Mathematics	6.2	12.2	9.1	<<	Extensive development of skills in this area may be required
Coordination	9.1	11.8	10.3	<	A higher skill level may be required
Learning Strategies	7.2	11.7	8.7	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	10.6	8.0	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	9.3	2.8	<<	Extensive development of skills in this area may be required
Programming	2.2	6.3	4.6	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Forest and Conservation Technicians (19-4093)

Associated Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation		
Inductive Reasoning	10.2	16.5	10.6	<<	Extensive improvement in abilities may be required	
Written Comprehension	11.0	16.3	11.4	<<	Extensive improvement in abilities may be required	
Problem Sensitivity	11.1	15.8	11.1	<<	Extensive improvement in abilities may be required	
Deductive Reasoning	10.6	15.1	11.8	<<	Extensive improvement in abilities may be required	
Written Expression	9.8	14.4	9.4	<<	Extensive improvement in abilities may be required	
Category Flexibility	9.0	13.0	9.8	<<	Extensive improvement in abilities may be required	
Information Ordering	9.9	12.9	10.8	<	Some improvement in abilities may be required	
Mathematical Reasoning	6.3	12.2	8.0	<<	Extensive improvement in abilities may be required	
Number Facility	6.3	11.9	7.9	<<	Extensive improvement in abilities may be required	
Flexibility of Closure	7.8	11.6	10.1	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 80

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Advise clients or customers	19
Analyze biological research, test, or analysis data	70
Analyze scientific research data or investigative findings	27
Classify plants, animals, or other natural phenomena	69
Collect geographic or physical data	81
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Compile numerical or statistical data	38
Conduct field research or investigative studies	52
Conduct laboratory research or experiments	57
Determine negligence or violation of laws or regulations	92
Develop or maintain databases	30
Develop tables depicting data	33
Direct and coordinate activities of workers or staff	3
Enforce laws, ordinances, or regulations	66
Ensure compliance with government regulations	76
Explain complex mathematical information	30
Explain government laws or regulations	68
Follow safe waste disposal procedures	50
Make presentations	13
Prepare reports	8
Read maps	42
Record test results, test procedures, or inspection data	48
Use biological research techniques	68
Use biological testing instruments	73
Use building or land use regulations	65
Use chemical testing or analysis procedures	54
Use computers to enter, access or retrieve data	3
Use government regulations	44
Use hazardous materials information	35
Use interpersonal communication techniques	10
Use knowledge of environmental laws and regulations	76
Use knowledge of investigation techniques	16
Use laboratory equipment	60
Use mathematical or statistical methods to identify or analyze problems	30
Use pollution control techniques	62
Use quantitative research methods	35

Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 67

Focus Occupation: Forest and Conservation Technicians (19-4093)
Associated Occupation: Environmental Scientists and Specialists, Including Health (19-2041)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Humidity and moisture measuring instruments	15
Hydrological instruments	31
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Meteorological instruments	16
Network applications software	1
Personal communication devices	2
Recreational watercraft	40
Sampling equipment	12
Soil measuring equipment	20
Specialized and recreational vehicles	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.